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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,187	07/02/2003	Scott Beers	PRD0017NP	5296
27777	7590	01/05/2006	EXAMINER	
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			KOSACK, JOSEPH R	
			ART UNIT	PAPER NUMBER
			1626	
DATE MAILED: 01/05/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,187

Applicant(s)

BEERS, SCOTT

Examiner

Joseph Kosack

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

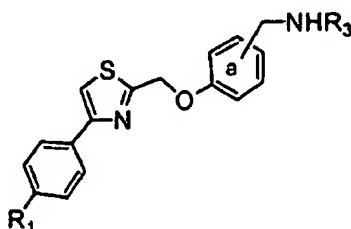
- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/04/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-17 are pending in the instant application.

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on October 11, 2005 is acknowledged. Also, an election of species has been made of Compound 3 on page 6 of the specification:



where R₁ is chloro, a is 3, and R₃ is cyclopentyl.

The traversal is on the ground(s) that a complete search of the defined areas would not impose a serious burden on the examiner since both groups are classified in various subclasses of class 514. This is not found persuasive because the search of a compound and a method of treating using said compound requires a divergent search since a search of the compound would not entail searching for a method of using said compound and vice versa. Hence, a complete search of the defined areas would impose a serious search burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

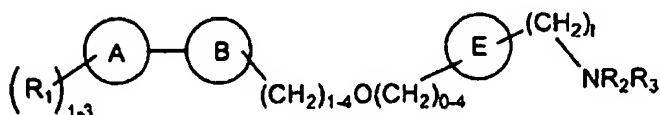
Status of the Claims

Claims 1-17 are pending in the instant application. Claims 1-12 (in part) and claims 14-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. The withdrawn subject matter is

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patentably distinct from the elected subject matter as it differs in the structure and element and would require separate search considerations. In addition, a reference, which anticipates one group, would not render obvious the other.

Pursuant to Applicant's election of a species, the scope of the invention will be limited to the following substitutions of the base structure



where:

- R_1 will represent halogen with one substitution in the 3,4, and 5 positions;
- A will represent a phenylene;
- B will represent thiazole;
- the linker between B and E will be $-CH_2O-$;
- E will represent phenylene;
- t will be 1
- R_2 will be hydrogen;
- R_3 will be as defined.

As a result of the election and the corresponding scope of the invention defined supra, the remaining subject matter of Claims 1-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected inventions. The withdrawn compounds contain varying functional groups such as pyrimidinyl, piperidinyl, imidazolyl, pyrrolidinyl, etc, which are chemically recognized to differ in structure and function. This recognized chemical diversity of the functional groups can

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be seen by the various classification of these functional groups in the U.S. classification system, i.e. class 544 subclass 244(+) (diazines), class 546 subclass 184(+) (piperidines), 546 subclass 249(+) (pyridines), etc. Therefore the subject matter which are withdrawn from consideration as being non-elected subject matter differ materially in structure and composition and have been restricted properly a reference which anticipated but the elected subject matter would not even render obvious the withdrawn subject matter and the fields of search are not co-extensive.

Priority

The claims to priority of US Serial No. 60/393,710 filed on July 3, 2002 has been acknowledged for the instant application.

Information Disclosure Statement

The Information Disclosure Statement that was received on February 4, 2004 has been considered fully by the examiner.

Claim Objections

Claims 1-12 are objected to for containing elected and non-elected subject matter. The elected subject matter have been identified supra.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

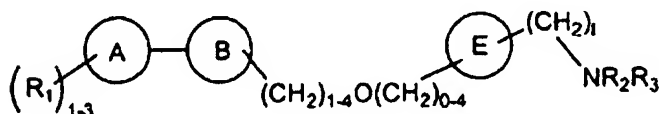
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Lau et al. (*Biorganic & Medicinal Chemistry Letters* 1995, 1615-1620) in view of McMurry (*Organic Chemistry, Fourth Edition* 1996, pages 377-385, 603-604, 679-680, and 946-947), and Dominianni et al. (WO 96/13264).

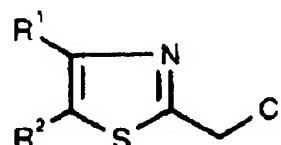
The instant application cites a compound with the formula of the base structure



where: R₁ represents a halogen with

one substitution in the 3,4, and 5 positions; A represents phenylene; B represents thiazole; the linker between B and E is -CH₂O-; E represents phenylene; t is 1; R₂ is hydrogen; and R₃ is as defined.

Determination of the scope and content of the prior art (MPEP §2141.01)



Lau et al. teach a compound which has the formula:

where R¹ is 4-Cl-phenyl and R² is H. See Compound 11 on page 1617.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Lau et al. do not teach the compound described above with an ether linkage to a substituted phenyl ring instead of an alkyl chloride.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

McMurry teaches the bromination of alkylbenzene side chains using N-bromosuccinimide. See pages 603-604. McMurry then teaches the substitution of halogen by ammonia via a S_N2 reaction. See pages 377-385. McMurry goes on to teach the process for alkylation of a primary amine by an alkyl halide. See pages 946-947. McMurry finally teaches the formation of an ether linkage via the Williamson ether synthesis. See pages 679-680.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to take commonly available ortho-, meta-, or para-cresol, brominates the methyl group with N-bromosuccinimide, react the product with ammonia to yield a primary amine, alkylate said primary amine with any alkyl halide, and react the above phenol with the compound of Lau et al. to create the instant invention with a reasonable expectation of success. The motivation to do so is provided by Dominianni et al. who teach the process to make structurally similar compounds as antihyperglycemic compounds. See page 2, lines 10-18, and page 50, Part B of Example 18.

Thus, the claimed invention as a whole was *prima facie* obviousness over the combined teachings of the prior art.

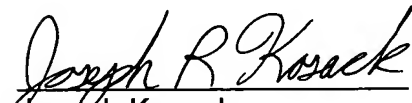
Conclusion

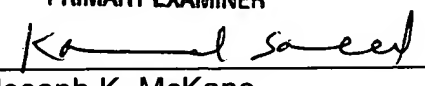
Claims 1-13 are rejected. Claims 1-12 are objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 7:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joseph Kosack
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Art Unit 1626

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for Joseph K. McKane
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